



# Catheter Ablation of Focal Parahisian Atrial Tachycardia from the Non- coronary Aortic Cusp

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# Catheter Ablation of Focal Parahisian Atrial Tachycardia from the Non- coronary Aortic Cusp

Cristiano Pisani

**NO CONFLICT OF INTEREST TO DISCLOSE**

# Introduction

- Parahissian Atrial tachycardia are rare and represent a challenge in the electrophysiology laboratory.
- Left side approach through aorta could be a safe alternative for ablation

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Total RA 81/129 (63%)

Total LA 48/129 (37%)

CT 28 (22%)

Perinodal  
R.Septum  
8 (6%)

CS ostium  
13 (10%)

RAA 3 (2%)

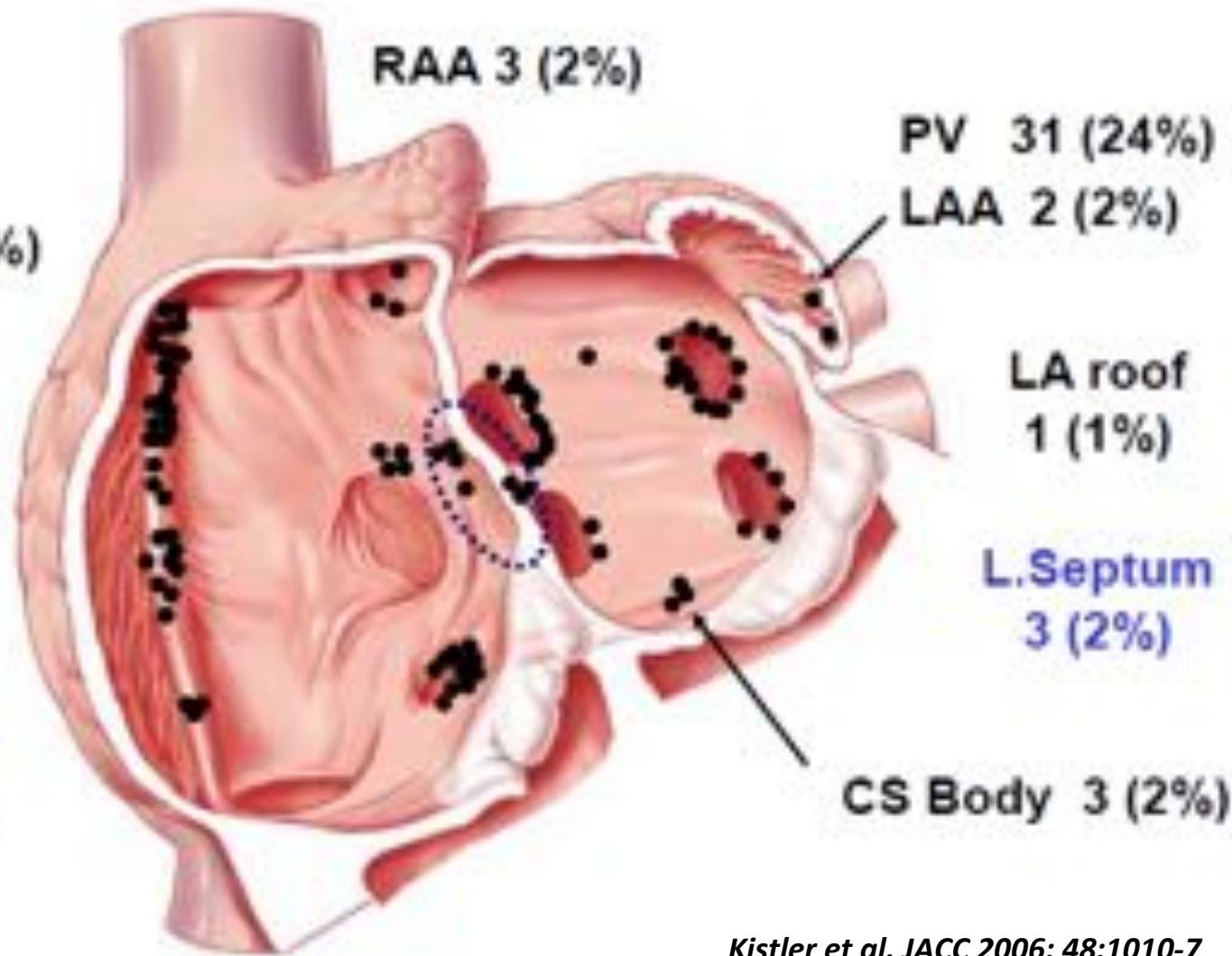
PV 31 (24%)

LAA 2 (2%)

LA roof  
1 (1%)

L.Septum  
3 (2%)

CS Body 3 (2%)



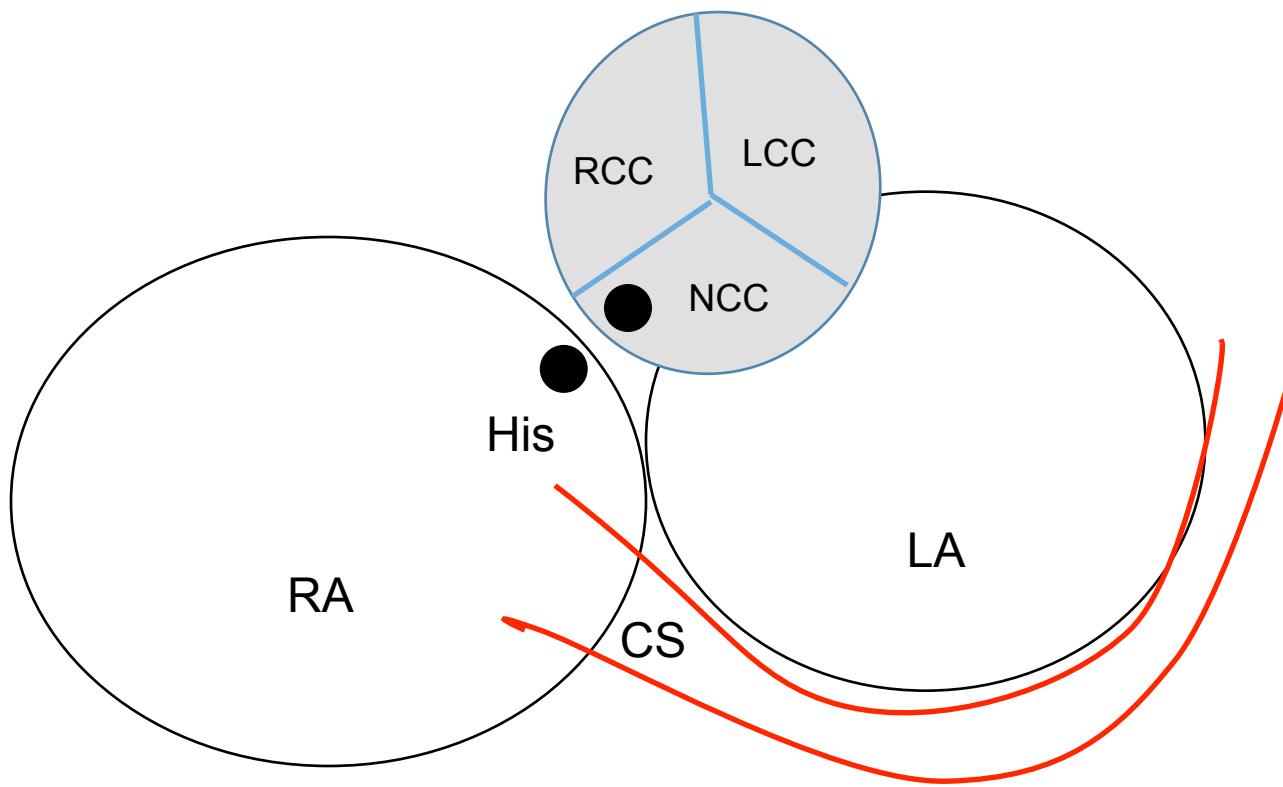
Kistler et al. JACC 2006; 48:1010-7

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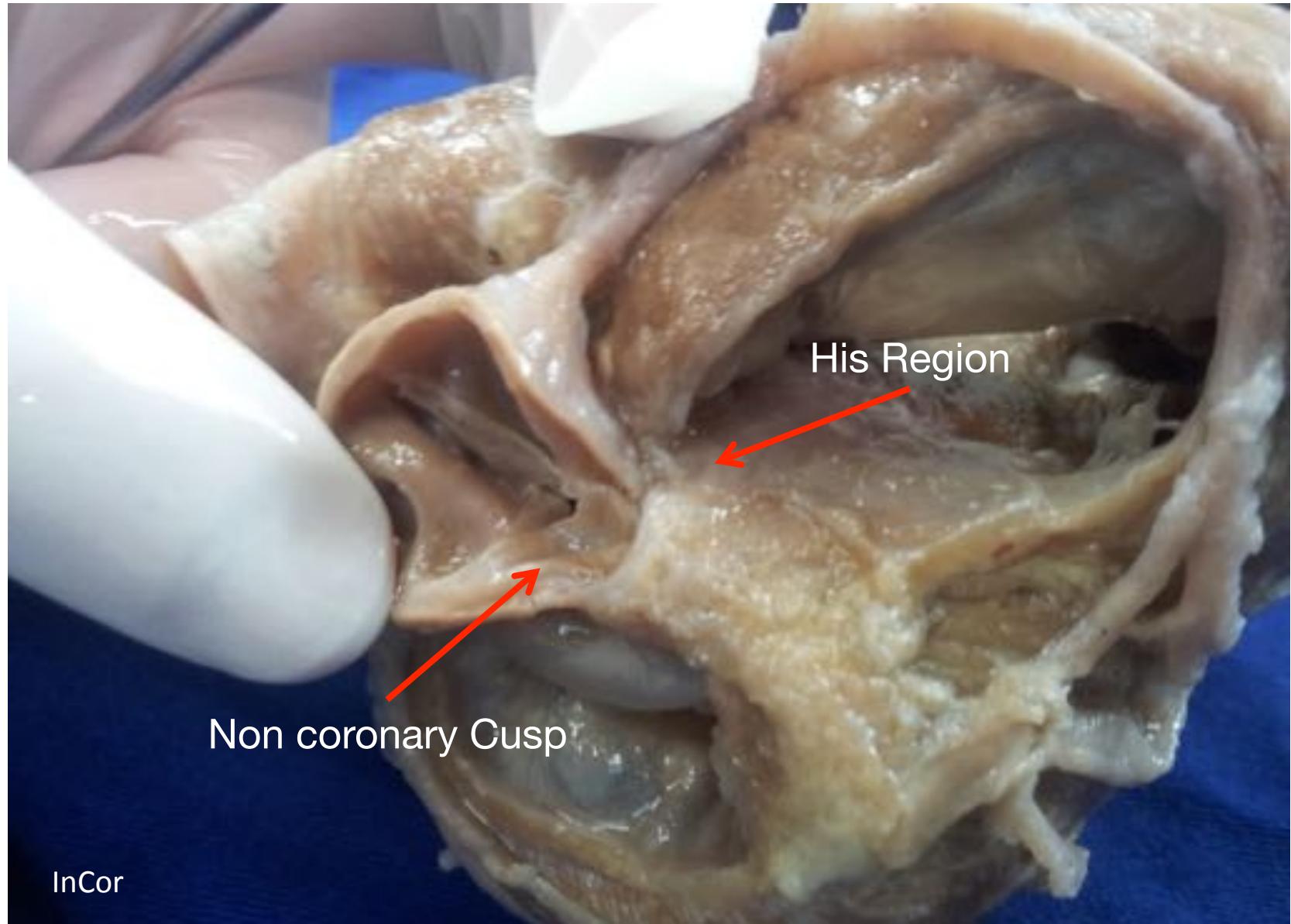


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## Methods:

- We selected patients that underwent atrial tachycardia ablation with earliest activation at the parahissian region between 2012 and 2014.
- Excluded patients with structural heart disease and previous ablation.
- Atrial tachycardia was confirmed by EP maneuvers:
  - Refractory His ventricular pacing without changing atrial activation
  - VAAV response for ventricular entrainment
  - No dependency of AV conduction for induction or maintaince of tachycardia.
  - AV block during tachycardia

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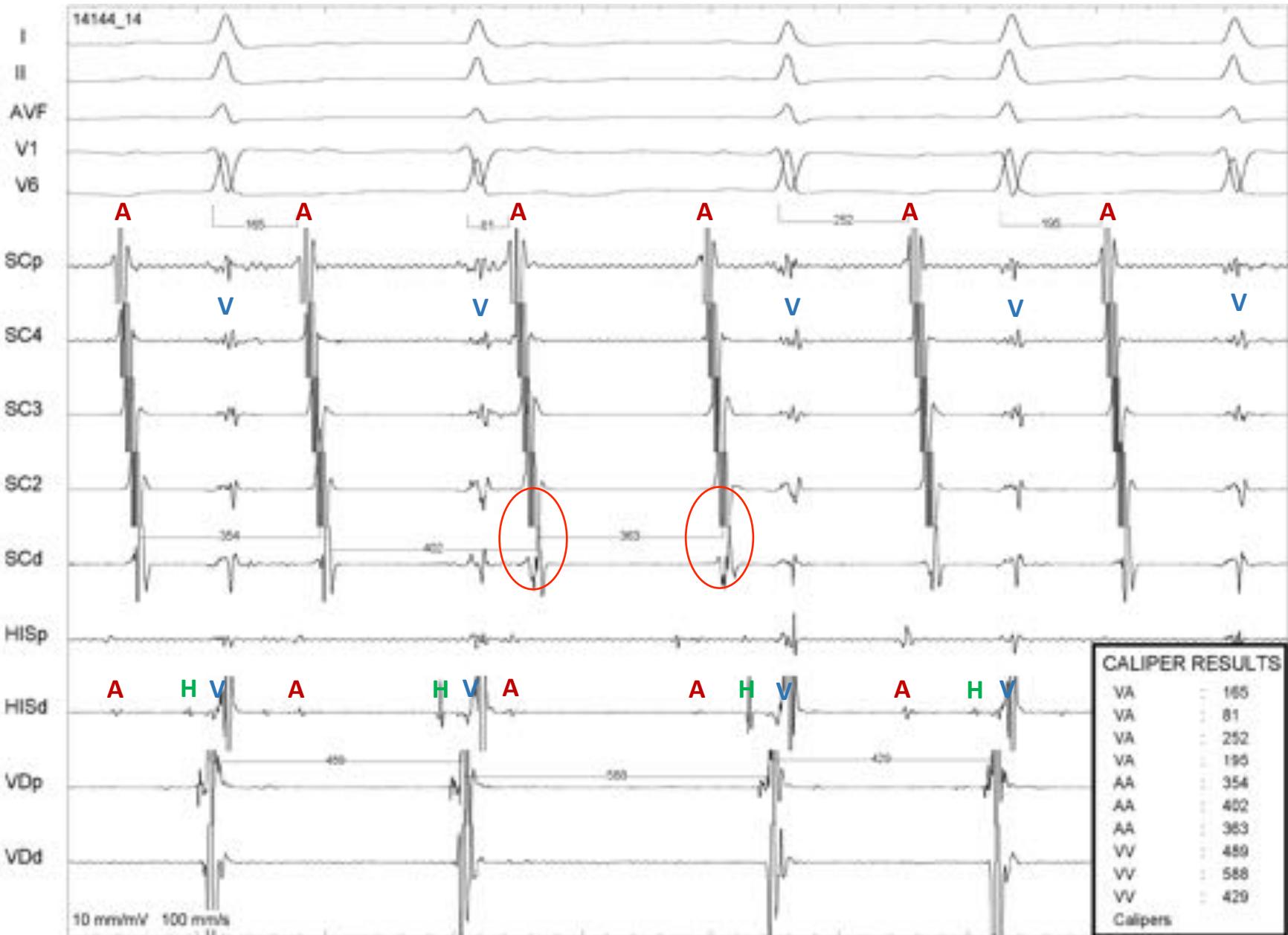


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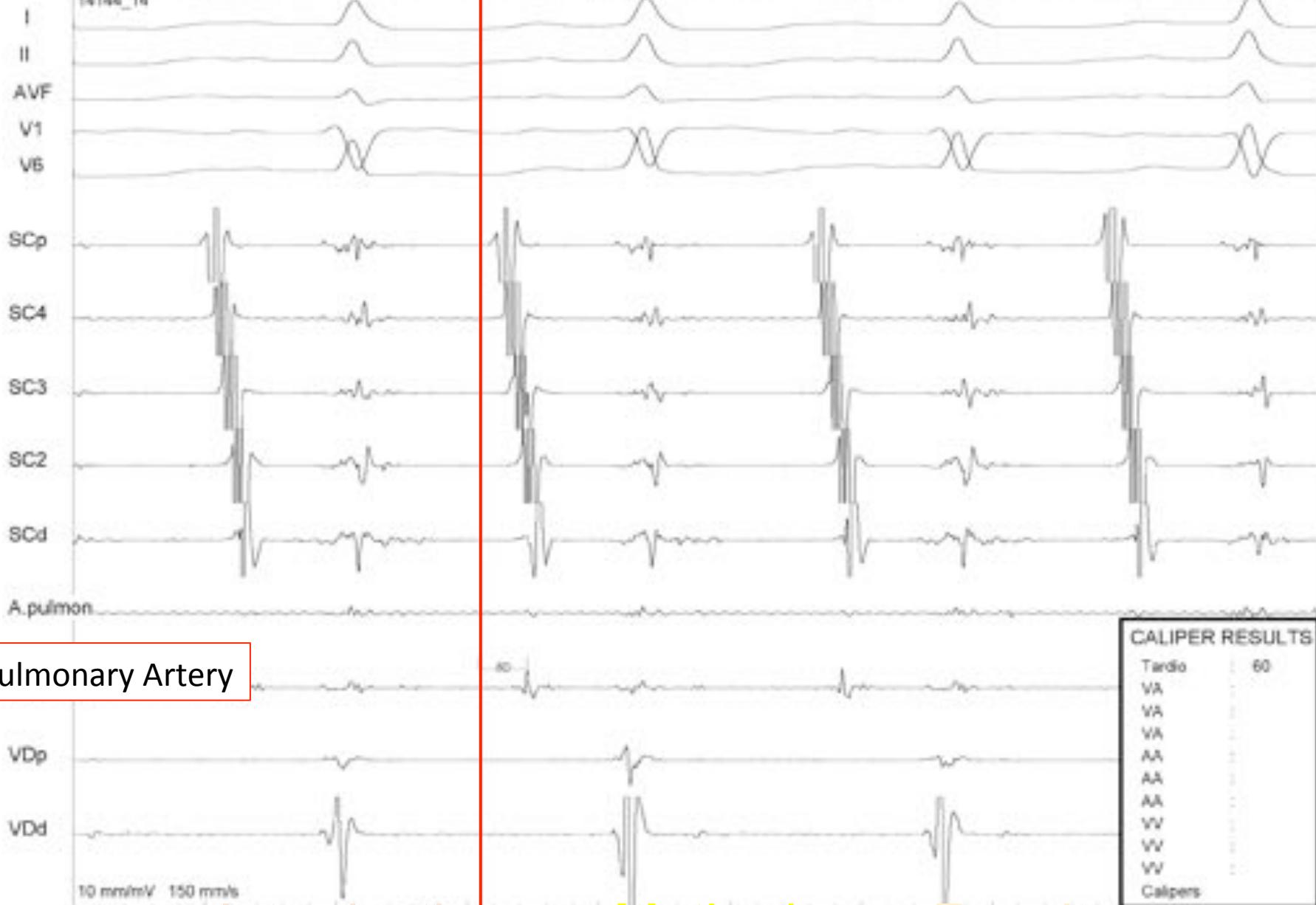
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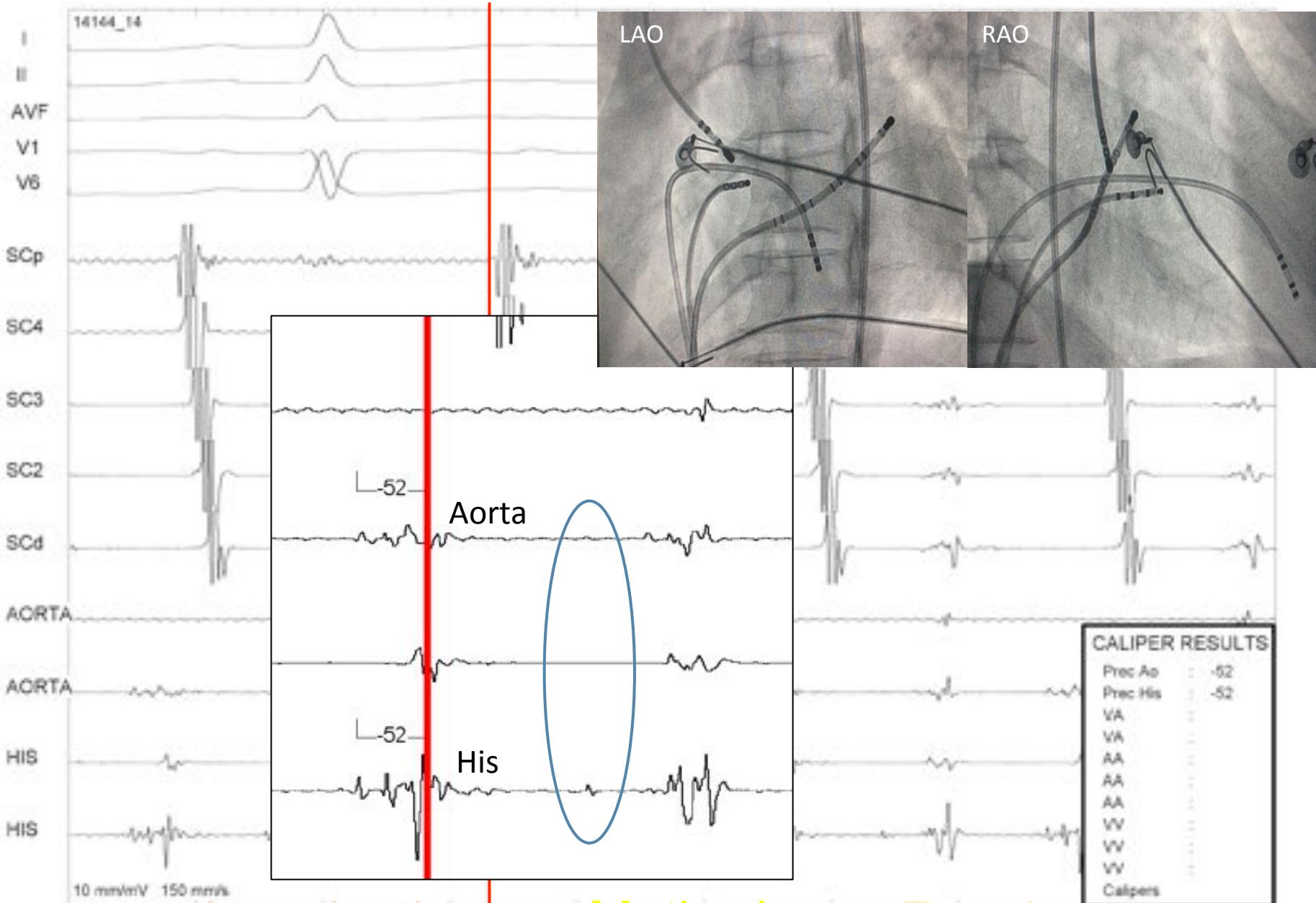
CALIPER RESULTS	
Tardio	60
VA	
VA	
VA	
AA	
AA	
AA	
VV	
VV	
VV	
Calipers	

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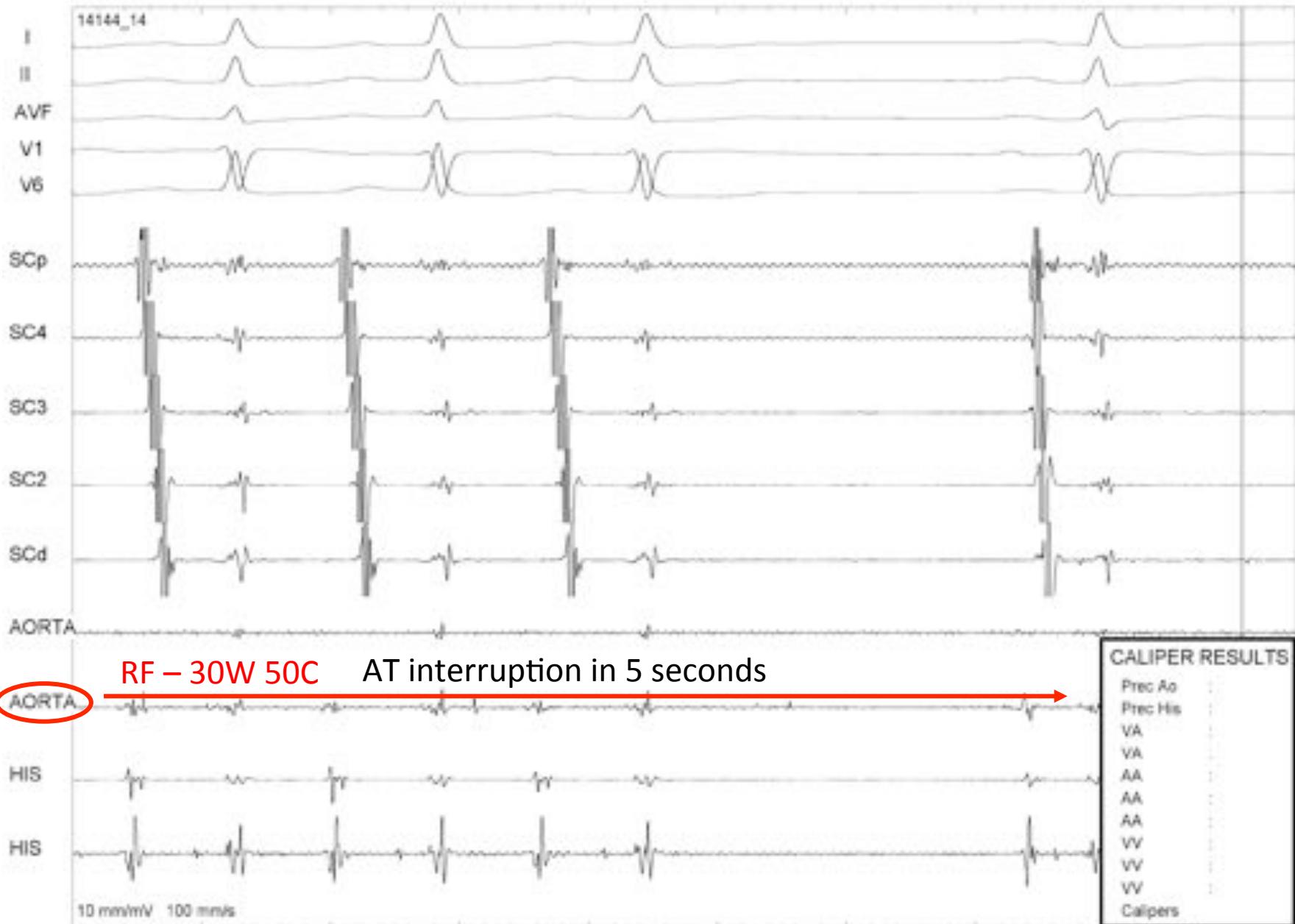
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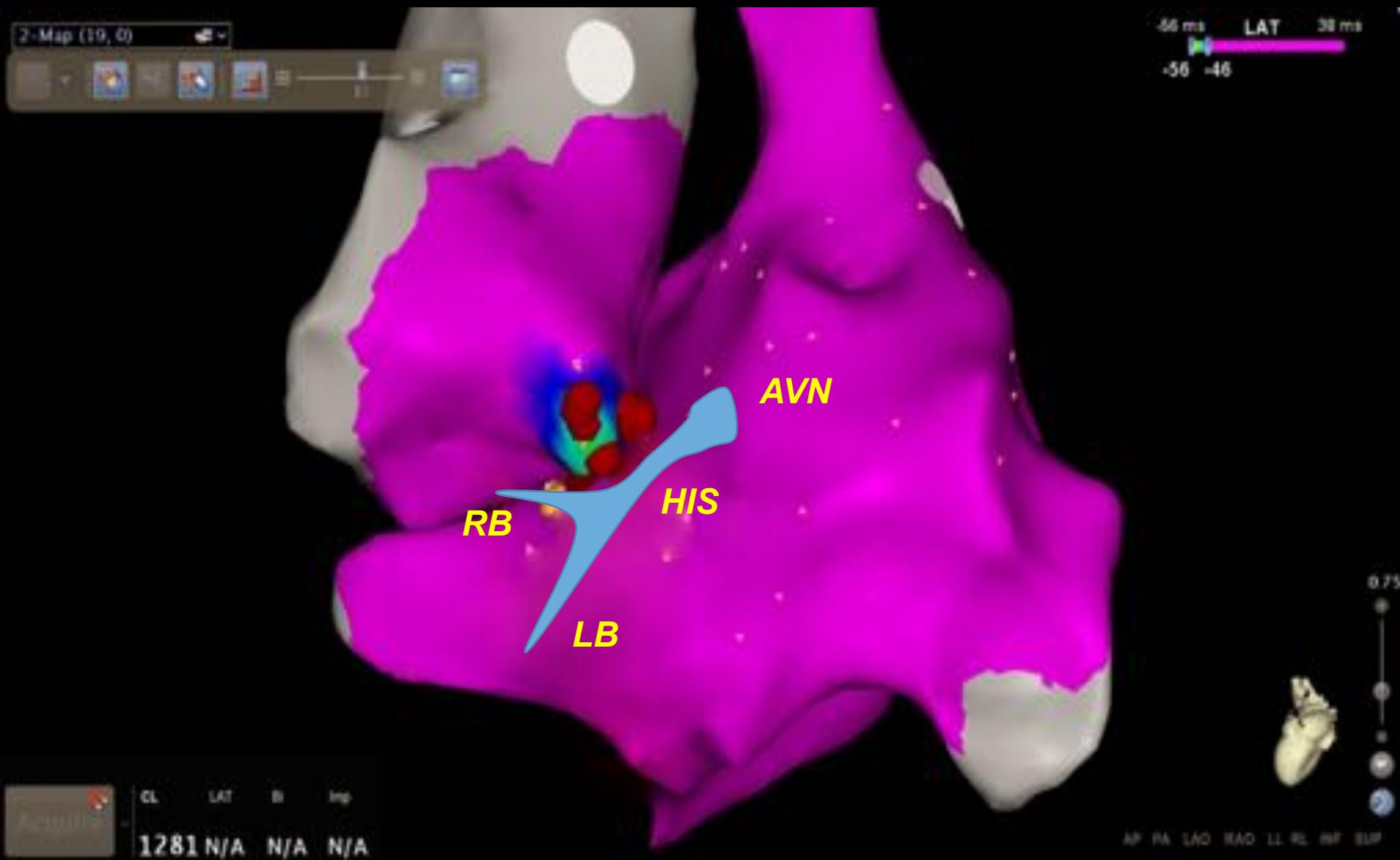


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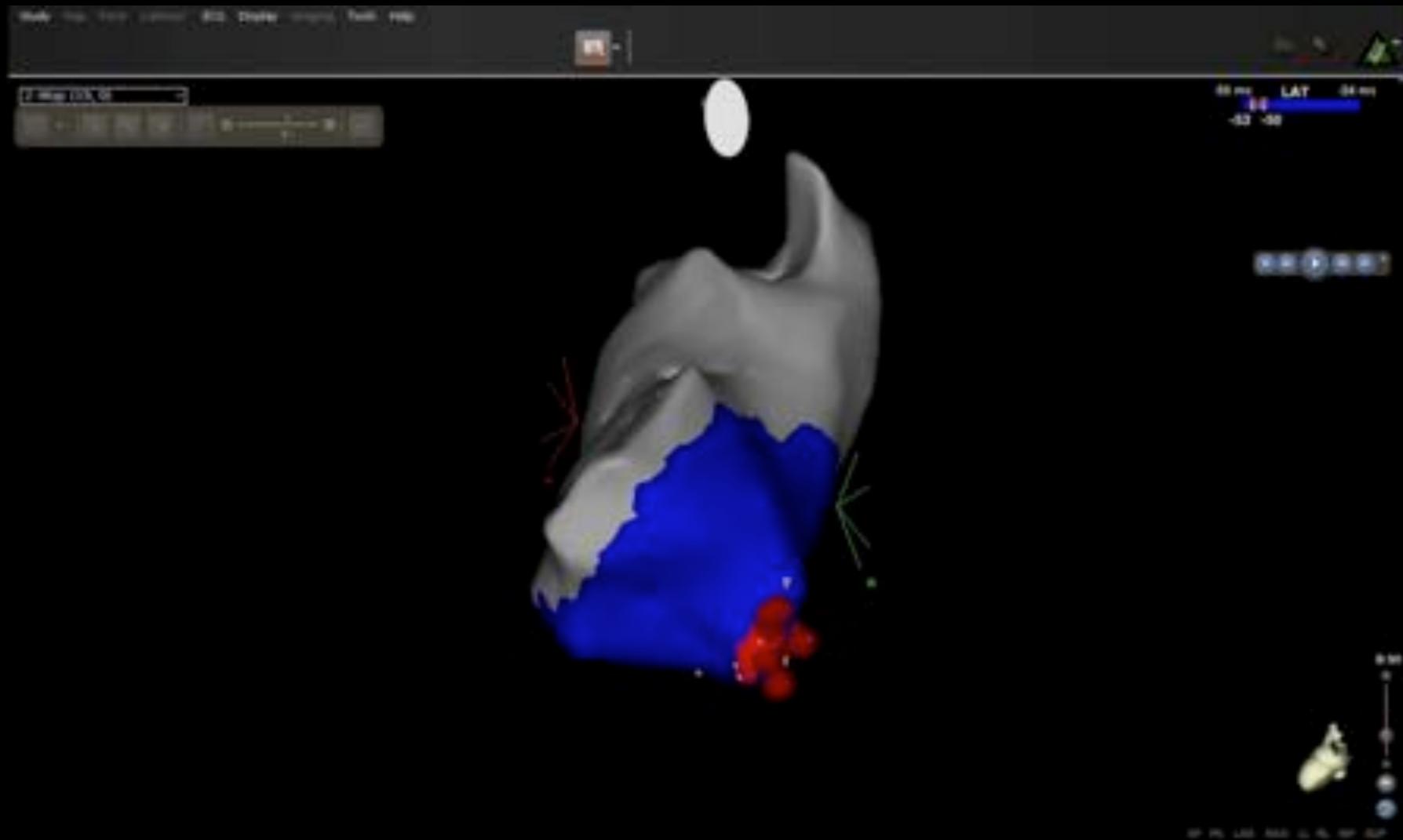


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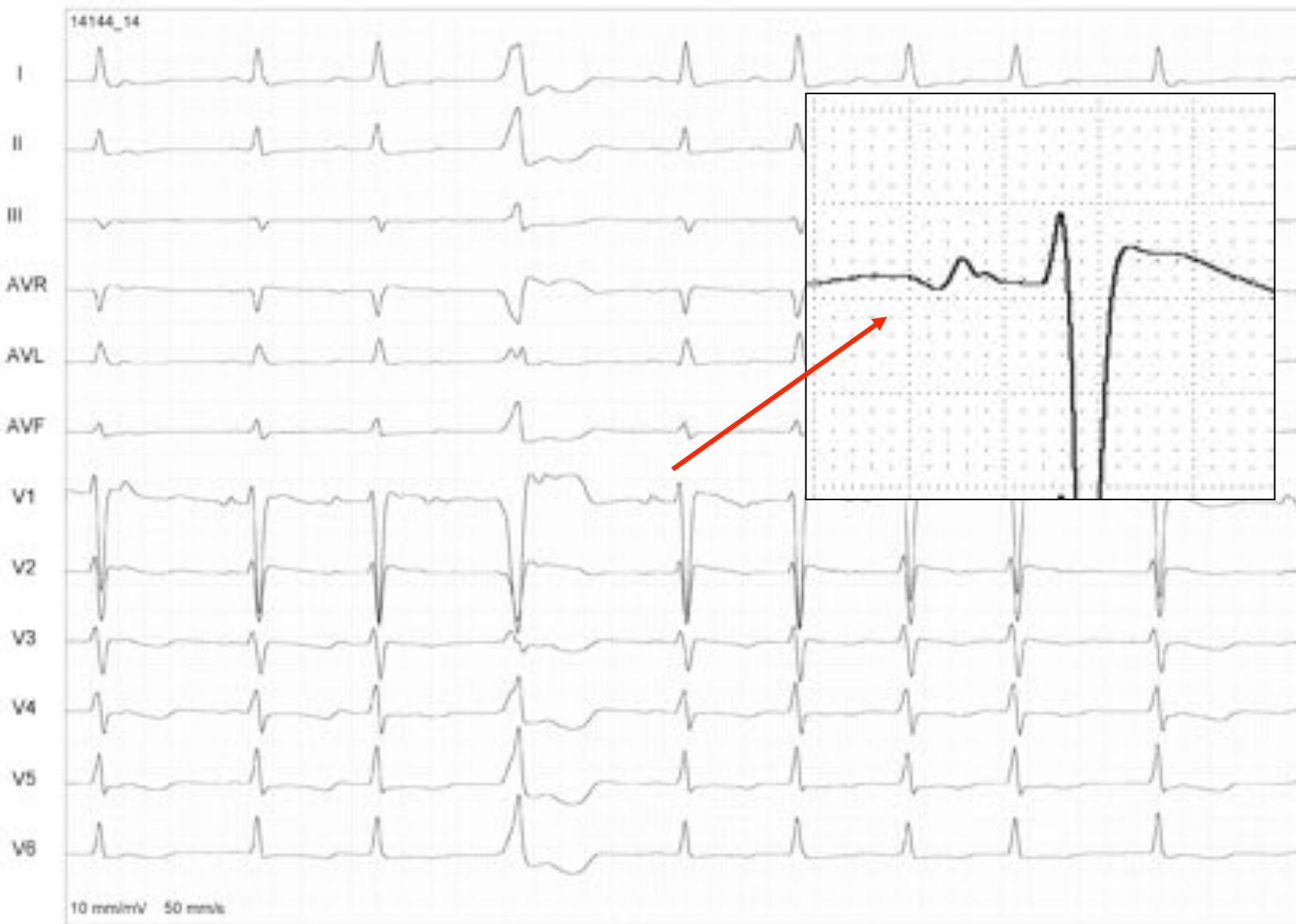
Pt	DI	DII	DIII	AVR	AVL	AVF	V1	V2	V3	V4	V5	V6
#1	+			-	+		-/+		+	+	+	+
#2	+			-	+		-/+		-/+	+	+	+
#3	+			-	+		-/+		-/+	+	+	+
#4	+			-	+		-/+		+	+	+	+
#5	+			-	+		-/+		+	+	+	+
#6	+			-	+-/+		-/+		-	+	+	+

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## Results:

- Tachycardia Cycle Length:  $362 \pm 43$ ms
- Earliest Atrial Activation (P Wave):  $23 \pm 12$ ms
- Atrial activation on Aorta compared to right atria:  $3 \pm 2$ ms
- Time to AT interruption:  $5 \pm 3$ ms
- No Junctional rhythm during RF application
- No complications on the 6 cases
- One patient presented AT recurrence in a follow-up of  $12 \pm 3$ months.

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# Conclusions:

- Parahissian AT ablation through the non-coronary cusp is feasible and save, being an alternative to the ablation of this complex arrhythmia.

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